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AUTHOR Radecki-Bush, Catherine; Bush, Joseph P.
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ABSTRACT

Individual differences in adult attachment have been the focus of recent research on personal relationships. Research has indicated that those with insecure attachment histories were more threatened by a partner's attraction to a rival than were persons reporting secure parental attachment. Higher levels of dispositional jealousy have also been found to be correlated with depression. It was predicted that person and situation variables would be associated with differences in cognitive and affective responses to imagined scenarios involving a rival to a romantic relationship. Subjects (N=134) were undergraduate students who were currently involved in romantic relationships. Subjects imagined a control scene of their partner and their relationship and one of three scenes presenting varying levels of threat to the relationship by a third person. A main effect for attachment was found. Subjects, regardless of level of threat to their relationships, who described themselves as secure in attachment relationships, reported greater joy and perceived relationship security, power, and perceived attractiveness to their partners, and lower levels of jealousy and other negative affects. Situation also yielded a main effect. Jealousy, negative relationship perceptions and emotions were evoked when the threat to the relationship by a rival was highest. Additional findings regarding depression, appraisal of threat, and coping suggest differences in mental health adjustment between attachment types. (Author/LLL)

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# Quality of relationships and romantic jealousy:

# Effects of adult attachment and depression

Catherine Radecki-Bush

Joseph P. Bush

Department of Psychology

Virginia Commonwealth University

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Abstract

According to theorists (eg. Bowlby, 1969; Hazan & Shaver, 1987) secure and insecure attachment relationships demonstrate continuity from infancy because the original caretaker interaction produces enduring relationship schemas. This study predicted that person (attachment style) and situation (level of threat) variables would be associated with differences in cognitive and affective responses to imagined scenarios involving a rival to a romantic relationship. A main effect for attachment was found, supporting the pattern of attitudinal and affective differences predicted by Hazan and Shaver's (1987) theory. Undergraduates, regardless of level of threat to their relationships, who described themselves as secure in attachment relationships (in contrast to avoidant or anxious), reported greater joy and perceived relationship security, power, and perceived attractiveness to their partners, and lower levels of levels of jealousy and other negative affects. Situation also yielded a main effect. Jealousy, negative relationship perceptions and emotions were evoked when the threat to the relationship by a rival was highest. Additional findings regarding depression, appraisal of threat, and coping suggest differences in mental health adjustment between attachment types.

## Introduction

Individual differences in adult attachment have been the focus of recent research on personal relationships (Hazan and Shaver, 1987; Shaver, Hazan & Bradshaw, 1988). When subject relationship patterns were categorized as secure, avoidant, or anxious, the three types could be discriminated on the basis of attitudes and experiences in love relationships. The authors postulated that these differences were related to working models (or schemas) developed in and generalized from the original caretaker relationship.

Bowlby (1969) contends that the function of attachment behavior is to maintain proximity to an attachment figure. He observed that when the attachment figure is present, the individual feels joy and a sense of security. If the attachment relationship is threatened, there is anxiety, protest and attempts to re-establish contact. A previous study by Bush, Bush, & Jennings (1988) examined person and situation effects as predictors of jealousy. Dispositional variables of global self-esteem and trait jealousy, while moderately correlated with one another, were not significant predictors of responses to jealousy evoking situations. Threat to the relationship was evocative of affective and perceptual differences. Mild threat scenes elicited the greatest level of possessiveness while high threat scenes elicited greater levels of distress and decreased security much as described in young children by Bowlby (1973) when separation from an attachment figure occurs.

Jealous behaviors may involve an attempt to maintain the relationship or, instead, to bolster self-esteem through denial of jealousy, feigning indifference, or leaving the

relationship. Establishing proximity and avoiding the arousal of attachment in response to jealousy threat are reminiscent of anxious and avoidant attachment behavior, respectfully. Hazan and Shaver (1987) found that those with insecure attachment histories were more threatened by a partner's attraction to a rival than were persons reporting secure parental attachment. This suggests that jealousy is functionally related to attachment schemas. Likewise, attachment schemas may affect jealousy experiences by influencing the general quality of a romantic relationship. Poor quality relationships are likely to be more vulnerable to relationship stressors, such as when a rival for the partner intervenes.

Higher levels of dispositional jealousy have also been found to be correlated with depression (Jaremko & Lindsey, 1979). Fiske and Peterson (1989), focusing on depression and romantic relationships, found that depressives reported greater dependency, anger, dissatisfaction and unrealistic relationship expectations. The generalized negative self and relationship expectancies associated with both depression and insecure attachment could lead to feelings of helplessness and ineffectualness and a greater propensity to perceive threat by any rival to the relationship.

Hypothesis 1: Insecure attachment was expected to be related to negative relationship perceptions of insecurity/dissatisfaction, less willingness to depend on a partner, less perceived control in the relationship, and lower perceived attractiveness to one's partner. These variables have previously shown to be related to jealousy in imagined relationship threat situations (Bush et al., 1988). Insecure attachment was also expected to be related to negative affective responses in the relationship in general and in response to jealousy threat.

Hypothesis 2: Depressed and insecurely attached persons were expected to perceive more threat in jealousy evoking situations and to use less effective coping strategies compared to non-depressed and securely attached persons.

## Method

Subjects completed the Beck Depression Inventory (Beck, Ward, Mendelson, Mock, & Erbaugh, 1961) to assess current level of depression. The Close Relationships Questionnaire (Hazan & Shaver, 1987) was used to rate degree of agreement with three paragraphs describing attitudes toward partners, expectations about the longevity of close relationship and variations in comfort with emotional closeness. Subjects also selected the description which best characterized their attachment style to classify themselves as secure, avoidant or anxious/ambivalent.

The 134 undergraduates who were currently involved in romantic relationships imagined a control scene of their partner and relationship at this moment in time" and one of three scenes presenting varying levels of threat to the relationship by a third person (high, moderate or no threat). In response to both the control and threat scene, subjects rated 12 emotions on the Differential Emotions Scale (Izard, Dougherty, Bloxon, & Kotsch, 1974) and relationship perceptions on a 20 item scale used previously by the authors (Bush, Bush, & Jennings, 1988) which assesses five relationship factors (jealousy, absolute dependency, security/stability of the relationship, perceived control or power in the relationship, and self-perceived attractiveness/acceptability to the partner).

Prior to rating the jealousy scenario, subjects wrote a brief summary of what they imagined. This summary was rated by an undergraduate research assistant, blind to

subject variables, for degree of perceived threat posed by the imagined rival. Finally, subjects completed the Ways of Coping-Revised (Folkman & Lazarus, 1985) to rate the likelihood of using five coping strategies in response to a rival to their relationships. Self-blame, wishful thinking, problem-solving, seeking social support and avoidance coping strategies were scored (Vitaliano, Russo, Carr, Miauro, & Becker, 1985).

## Results

### Attachment and quality of current romantic relationships

Self and relationship perceptions and emotions in the current relationship were the predictor variables in a discriminant analysis. With attachment type as the grouping variable, there were two significant discriminant functions with a combined $X^2$ (34, N=134)= 86.10, $p < .001$). After removal of the first function, $X^2$ (16, N=134)= 30.89, $p < .05$) for the second function. The first function accounted for 66.5% of the variance and discriminated the secure from insecure groups. The second function accounted for 33.5% of the variance and discriminated the avoidant from the secure and anxious groups. Regression weights generated from these analyses successfully predicted group membership for 68.7% of the sample.

Correlations of predictor variables with the first function are presented in Table 1. Persons who classified their close relationships as secure perceived their current relationships to be secure, stable, and satisfactory and themselves to be esteemed (attractive, desirable, and acceptable to their partners). This group reported experiencing greater joy in their relationships and lower levels of jealousy, distress, and

guilt. Avoidant types, in contrast to secure and anxious types, perceived themselves to be less willing to depend on their partners, more powerful in their relationships, and to experience greater fear in their relationships.

Attachment and level of depression

As expected in a non-clinical sample, Beck Depression Inventory (BDI) scores were low (M=7.43; Sd=5.35). Level of depression, however, differed by attachment, F (2,129)= 12.24, p, .001. Persons classifying themselves as avoidant (M=9.85, Sd=5.70) and anxious (M=9.71; Sd=6.77) had higher BDI scores than those with secure attachment (M=5.49; Sd=3.42), indicating that insecure attachment in close relationships is associated with higher levels of depression.

Depression and quality of current romantic relationships

Depression was also related to the quality of romantic relationships. Correlations ($p < .01$) indicate that persons who were more depressed reported greater relationship jealousy (r=.30), distress (r=.29), fear (r=.29) and guilt (r=.37). They perceived less security and satisfaction in their relationships (r= -.29, $p < .001$), and themselves as less attractive to their partners (r= -.39, $p < .001$).

Effect on relationship perceptions: Attachment and jealousy threat

Attachment and level of threat by a rival were the independent variables in a mixed effects MANOVA with repeated measures analysis which compared generalized relationship and self-in-relationship perceptions with perceptions rated in response to a threat. A significant between-subjects main effect for attachment style was found for ratings of relationship perceptions of security, dependency, power, attractiveness, and

jealousy, $F(10,252)=7.75$, $p< .001$. Post-hoc comparisons indicated that regardless of the level of threat imagined, subjects with secure attachments viewed their relationships as more secure and stable, and themselves as less jealous and more attractive/acceptable to their partners than insecure types. Anxious types viewed themselves as having less relationship power than did secure and avoidant types. Avoidant types differed significantly from secure types in their willingness to depend on their partners across both control and jealousy inducing scenes (See Table 2).

There was a significant change in relationship perceptions from the control to the imagined jealousy scene $F(10,252)=2.79$, $p < .01$. Compared to generalized perceptions of their relationships, subjects imagining a high threat to their relationships reported less security, satisfaction, and relationship stability than they did in the low or non-threatening imagined scenes.

Effect on emotions: Attachment and jealousy threat

Mixed effects MANOVA with repeated measures revealed a significant between-subjects main effect for attachment type in emotions rated in response to imagery scenes, $F (22,242)= 2.35$, $p< .01$. Post hoc contrasts indicated that persons with secure attachments reported lower levels of distress, guilt, and shame compared to insecure types. Persons with anxious attachments reported less joy across imagery scenes involving their romantic partner while persons with avoidant attachments reported more fear then anxious and secure types and greater anger than secure types (See Table 3).

The degree of threat (scene) presented by the rival yielded a significant between-subjects main effect, $F (24,242)=2.35$, $p< .01$. Greater distress, fear, anger, contempt,

guilt, shame and lower joy were reported in response to high and moderate threat scenes compared with no threat scenes (See Table 4). For tests involving the within-subjects effect, the intensity of joy decreased and all negative emotions except shyness increased from the control scene in response to jealousy threat scenes, $F$ (22,242)= 3.31, $p < .001$.

Attachment and coping with threat

Rival scenarios of moderate and high threat were perceived as more threatening by persons with insecure attachment as demonstrated by a significant ANOVA, $F(2,88) = 3.85$, $p < .05$). While avoidant subjects ($M$=8.50) did not differ from anxious subjects ($M$=7.78) in their appraisal of threat by a rival, they were significantly different from secure subjects ($M$=6.33) who were least likely to view a rival as threatening.

MANOVA yielded a significant main effect for attachment in choice of coping strategy, $F$ (10,160)= 2.50, $p < .01$. Univariate F tests (df=2,84) found that coping by blaming the self, $F$= 4.02, $p < .05$, and avoidant coping, $F$= 4.29, $p < .01$ were significant. Post hoc contrasts indicated that persons classifying themselves as anxiously attached were most likely to cope by blaming themselves in jealousy evoking situations. Persons with avoidant attachment were most likely to use avoidant strategies which minimize affect and distance themselves from others.

Depression and coping

Being depressed was also positively associated with appraising the rival as a potential threat to the relationship, $r$=.30, $p$<.01. There were significant associations between depression and choice of coping with jealousy threat. Depression was associated with wishful thinking ($r$= .21, $p < .05$), self-blame coping ($r$= .31, $p < .01$), avoidant coping

(r= .40, p< .01). Although depression and insecure attachment were correlated (depression with avoidant attachment, r= .37, p < .01 and with anxious attachment, r= .37, p < .01), their predictive relationship with coping represents unique contributions. When attachment and depression were entered as predictors into simultaneous multiple regressions, unique explained variance described by partial correlations indicated that avoidant coping was predicted by depression, r= .27, p< .05, and avoidant attachment, r= .30, p < .01. Self-blame coping was predicted by depression (r= .21, P< .05) and anxious attachment (r= .23, p< .05). Thus, depression and insecure attachment were each related to coping with relationship threats.

## Discussion

Results support Hazan and Shaver (1987), Collins and Read (1990), and Simpson's (1990) findings that quality of relationships varies on the basis of attachment style. Attachment types were discriminated by relationship and self-in-relationship perceptions. Persons with secure attachment viewed their relationships as more secure, satisfying and promising for the future, and themselves as less jealous and more attractive and acceptable to their partners. These findings are consistent with Simpson (1990) who found secure attachment to be associated with greater trust, satisfaction, commitment, and relationship interdependence. Persons with avoidant attachment, were found, in contrast to anxious and secure types, to perceive themselves as less dependent on and to have more control in their relationships. This is consistent with developmental formulations which view avoidant attachment as a defense against becoming too close to

a rejecting caretaker (Ainsworth, Blehar, Waters, & Wall, 1978). Attachment also explained differences in the intensity of positive and negative emotions reported in current relationships.

When threat by a rival to the relationship was presented, insecure attachment was also related to reports of more intense negative emotions and negative self and relationship perceptions. This cross situational consistency suggests that attachment style may function as a schema in which experience is filtered through expectancies regarding close relationships. Situations of potential threat by a third person lowered subjects' ratings of joy and security and increased jealousy and negative emotions across scenes. This pattern, like Bowlby's observations of infants' responses to separation from an attachment figure, suggests that threat by a rival to a relationship may function to activate the attachment system and that jealousy is one negative affective-cognitive response related to insecure forms of attachment.

Findings suggested that attachment may affect the appraisal of threat and be related to coping. Persons with anxious attachment responded to relationship threat by blaming themselves. White (1981) found jealousy to be related to the perception of oneself as an inadequate romantic partner. If anxiously attached persons do, in fact, blame themselves when their partners pay increased attention to a rival, working models of themselves as inadequate may explain their choice of coping response and their greater jealousy. By blaming themselves instead of their partners, they may be attempting to preserve their relationships.

In contrast, those with avoidant attachment styles rated themselves as less willing to

depend on their partners and more likely to cope by withdrawing or by using strategies intended to deny or minimize affect. White and Mullen (1989) described coping strategies which included attempts to restore self-esteem by pretending one isn't affected, seeking alternatives, or derogating the partner. These strategies might prove to be preferred by those with avoidant attachment. In any event, our findings suggest that there may be dispositional aspects of coping with threats to attachment relationships. Future research might examine differences by attachment type in the use of specific coping behaviors in response to relationship threats.

Not only are the consequences of insecure attachment apparent in subjects' reports of quality of relationship, but as individuals they report higher levels of depression than do those with secure attachments. The measure of depression used, the BDI, contains numerous statements of negative self-worth. Collins and Reed (1990) found lower global and social self-esteem to be associated with fears of being abandoned or unloved, two factors associated with insecure attachment. Negative self-perceptions within the working models of insecurely attached results may predispose these persons to greater depression.

Additionally, both of these coping strategies associated with insecure attachment were also correlated with depression in this study. Wishful thinking, avoidance and self-blame strategies have been previously labeled as ineffective coping strategies because they have been found to predict depression (Rohde, Lewinson, Tilson, & Seeley, 1990; Vitaliano, Russo, Carr, Miauro, & Becker, 1985; Coyne, 1981). Thus, insecure attachment schemas may affect appraisal of the ability to control relationship outcomes which, in turn, leads to the use of ineffective emotion focused coping and depression.

Because persons with insecure attachment were found to be higher in depression and to respond to relationship difficulties with greater perceived threat appraisal, one might expect a higher percentage of persons with insecure attachment styles to be represented among those presenting themselves for counseling in comparison to normal populations. Bowlby's theories were, in fact, based upon observations in a clinical setting with adults and findings in this study suggest that attachment status may predict psychological distress. Radecki-Bush, Bertok, and Anchors (1991, unpub) found that of 109 consecutive clients presenting themselves for counseling in a psychology department training clinic, 29% classified themselves as secure, 27% as anxious/ambivalent, and 43% as avoidant. This appears markedly different from percentages found by Hazan and Shaver (1987) of 56% (secure), 19% (anxious), and 25% (avoidant) in a sample of adult newspaper respondents.

In summary, results support predictions that attachment status would be identified by a constellation of self and relationship perceptions. This constellation was also related to responses to threat in jealousy scenarios by a rival. It was concluded that the cognitive schemas of insecurely attached persons, described by Hazan and Shaver, can help explain relationship problems such as jealousy as well as coping and personal adjustment. Further research designed to explore the latter findings may be fruitful for clinicians working with complaints of relationship dysfunction. This area of research promises to connect theories of developmental psychology and dynamic theories of personality to social learning and cognitive approaches.

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Table 1: Correlations between emotions, relationship perceptions, and relationship perceptions

| Item | Function 1 | Function 2 |
|---|---|---|
| Perceived attractiveness to partner | .73*** | -.01 |
| Perceived relationship security | .69*** | -.19 |
| Perceived relationship jealousy | -.38** | .23 |
| Guilt | -.36** | .23 |
| Joy | .33* | -.08 |
| Distress | -.30* | -.02 |
| Shame | -.24 | -.05 |
| Contempt | -.17 | .17 |
| Surprise | -.11 | -.02 |
| Interest | -.04 | .01 |
| Perceived power | .41 | .49** |
| Perceived dependency on partner | .23 | -.35* |
| Fear | -.33 | .34* |
| Disgust | -.11 | .23 |
| Possessive | -.16 | .22 |
| Anger | -.14 | .18 |
| Shy | -.11 | .17 |

Note: Function 1 discriminates secure from insecure types

Function 2 discriminates avoidant from anxious and secure types

Significance of univariate F Ratio with (1,131 d.f.)

Table 2 Relationship perceptions: Mean differences by attachment and scene for relationship in general & threat conditions

| | ATTACHMENT | | | | THREAT SCENE | | | |
|---|---|---|---|---|---|---|---|---|
| | Secure | Anxious | Avoidant | [1]F(2,125) | High threat | Mild threat | Non-threat | [1]F(2,125) |
| Security1 | 54.00 | 40.89 | 41.67 | | 48.08 | 44.73 | 51.28 | |
| Security2 | 50.04a | 35.60b | 38.56b | 19.95*** | 39.76a | 42.18b | 49.89b | 4.18* |
| Dependency1 | 23.04 | 21.22 | 18.26 | | 21.51 | 21.53 | 21.76 | |
| Dependency2 | 22.19a | 20.80 | 18.56b | 4.31* | 20.67 | 20.96 | 21.67 | .11 |
| Power1 | 10.73 | 8.00 | 10.81 | | 10.29 | 9.56 | 10.22 | |
| Power2 | 10.36a | 7.54b | 9.52a | 9.83*** | 9.04 | 9.55 | 9.78 | .28 |
| Esteem1 | 23.56 | 18.36 | 20.22 | | 21.22 | 21.18 | 22.11 | |
| Esteem2 | 22.51a | 16.11b | 17.59b | 28.32*** | 18.58 | 19.27 | 21.69 | 2.37 |
| Jealousy1 | 6.67 | 9.22 | 9.73 | | 7.69 | 8.87 | 7.29 | |
| Jealousy2 | 8.61a | 11.46b | 11.22b | 6.64* | 11.56 | 9.82 | 8.27 | 2.16 |

Note: Relationship Perception1= relationship in general; Relationship Perception2= threat scenario

Means with different subscripts differ significantly (* $p < .01$ ** $p < .001$)

Table 3: Mean differences emotions by attachment for relationship in general and threat scene

| | ATTACHMENT | | | |
|---|---|---|---|---|
| Emotion | Secure | Anxious | Avoidant | [1]F(2,132) |
| Interest1 | 2.84 | 2.90 | 2.84 | |
| Interest2 | 2.73 | 2.56 | 2.56 | .12 |
| Joy1 | 3.97 | 3.26 | 3.60 | |
| Joy2 | 1.46b | 1.30a | 1.50b | 5.90** |
| Surprise1 | 2.17 | 2.39 | 2.22 | |
| Surprise2 | 2.53 | 2.26 | 2.68 | .17 |
| Distress1 | 1.54 | 2.06 | 1.86 | |
| Distress2 | 2.46a | 3.02b | 3.00b | 6.27** |
| Fear1 | 1.50 | 1.92 | 2.26 | |
| Fear2 | 2.10a | 2.45a | 2.83b | 7.62** |
| Anger1 | 1.45 | 1.62 | 1.83 | |
| Anger2 | 2.46a | 3.01 | 3.28b | 4.28* |
| Contempt1 | 1.34 | 1.49 | 1.60 | |
| Contempt2 | 1.93 | 2.14 | 1.93 | 1.09 |
| Disgust1 | 1.32 | 1.41 | 1.65 | |
| Disgust2 | 2.17 | 2.77 | 2.30 | 2.55 |

Table 3 Continued

| | | | | |
|---|---|---|---|---|
| Guilt1 | 1.25 | 1.57 | 1.72 | |
| Guilt2 | 1.38 | 1.68 | 1.72 | 7.62** |
| Shy1 | 1.50 | 1.59 | 1.70 | |
| Shy2 | 2.35 | 2.22 | 2.16 | .02 |
| Shame1 | 1.16 | 1.40 | 1.31 | |
| Shame2 | 1.69a | 2.30b | 2.09b | 5.22** |
| Possessive1 | 3.07 | 3.24 | 3.43 | |
| Possessive2 | 2.97 | 3.16 | 3.16 | 1.08 |

Note: [1]F= Between Ss Effect for mixed effects repeated measures ANOVAs

Means with different subscripts differ significantly

* p < .05, ** p > .01

Emotion1= relationship in general; Emotion2= threat scene

Table 4 : Mean differences in emotions for relationship in general and threat scenes

| EMOTION | SCENE High threat | Mild threat | Non-threat | $^{1}F(2,132)$ |
|---|---|---|---|---|
| Interest1 | 2.76 | 2.90 | 2.91 | |
| Interest2 | 3.04 | 2.60 | 2.30 | 1.40 |
| Joy1 | 3.76 | 3.27 | 4.09 | |
| Joy2 | 1.41 | 1.53 | 1.33 | 2.67 |
| Surprise1 | 2.15 | 2.31 | 2.25 | |
| Surprise2 | 3.04 | 2.30 | 2.11 | 2.54 |
| Distress1 | 1.56 | 2.16 | 1.50 | |
| Distress2 | 3.33a | 2.54b | 2.30b | 5.59** |
| Fear1 | 1.59 | 1.99 | 1.71 | |
| Fear2 | 2.93a | 2.24 | 1.84b | 3.42* |
| Anger1 | 1.50 | 1.79 | 1.42 | |
| Anger2 | 3.50a | 2.56 | 2.27b | 5.14** |
| Contempt1 | 1.44 | 1.60 | 1.26 | |
| Contempt2 | 2.41a | 1.93a | 1.63b | 6.94** |
| Disgust1 | 1.37 | 1.58 | 1.29 | |
| Disgust2 | 2.75 | 2.27 | 2.05 | 2.93 |

Table 4 Continued

| Emotion | SCENE: High threat | Mild threat | Non-threat | $^1F(2,132)$ |
|---|---|---|---|---|
| Guilt1 | 1.41 | 1.57 | 1.30 | |
| Guilt2 | 1.81a | 1.44 | 1.33b | 3.41* |
| Shy1 | 1.65 | 1.58 | 1.47 | |
| Shy2 | 2.45 | 2.12 | 2.26 | 1.79 |
| Shame1 | 1.16 | 1.47 | 1.15 | |
| Shame2 | 2.44a | 1.93a | 1.43b | 8.16*** |
| Possessive1 | 2.99 | 13.26 | 3.30 | |
| Possessive2 | 3.29 | 3.09 | 2.76 | .35 |

Note: $^1F$= Between Ss Effects in mixed effects repeated measure ANOVAs

Emotion1= relationship in general; Emotion2= threat scene

Means with different subscripts differ significantly

* $p < .05$, ** $p > .01$, *** $p < .001$